MOTOROLA

October 29, 1999

Mr. Thomas J. Sugrue
Chief, Wireless Telecommunications Bureau
Federal Communications Commission
The Portals, TW-A325
445 12th Street, S.W.
Washington, D.C. 20554

Ms. Kathleen M.H. Wallman
Chair
National Coordination Committee
Wallman Strategic Consulting
555 12th Street, N.W.
Washington, D.C. 20004

Re: WT Docket No. 96-86; WTB-2

Dear Mr. Sugrue and Ms. Wallman:

Motorola, Inc. (Motorola) would like to inform the Commission and the Public Safety National Coordination Committee ("NCC")[1] of recent positive developments concerning the Project 25 Phase II standard. These developments will allow for potential migration in Phase II to Time Division Multiple Access ("TDMA") technologies as well to the previously adopted Frequency Division Multiple Access ("FDMA") technologies. This would enable transparent interoperability with Phase I while using a TDMA technology platform.

As you know, the North American public safety user community has adopted an FDMA based technology platform for the Project 25 Phase I standard, key elements of which were approved by the American National Standards Institute in 1996. Phase II of Project 25 is designed to incorporate existing objectives of Phase I of Project 25 for interoperability and migration and to increase the spectrum efficiency of radios from 12.5 kHz to 6.25 kHz. The Project 25 Steering Committee has already approved Phase II Project 25 FDMA technology and is in the process of evaluating Time Division Multiple Access ("TDMA") alternatives for Phase II.

At a meeting of the Project 25 Steering Committee on October 21, 1999, Motorola proposed guidelines that would enable interoperability and migration between TDMA technology and FDMA technology for Project 25 Phase II. While there has been wide adoption of FDMA technology by the North American user community for Phase I and Phase II of Project 25, some

[1] The NCC is a Federal Advisory Committee, chartered by the Federal Communications Commission ("FCC"), to advise the Commission on a variety of issues related to spectrum reallocated for public safety at 764-776 MHz and 794-806 MHz. One of the key issues that the NCC is studying is interoperability for public safety spectrum. First Report and Order and Third Notice of Proposed Rulemaking, WT Docket No. 96-86, FCC 98-191, released September 29, 1999.

of the North American public safety user community have recently expressed interest in considering a TDMA technology alternative. Motorola believes that by proposing TDMA guidelines for Project 25 Phase II, it will allow the Project 25 Steering Committee to provide for a unified technology approach that includes the best features and benefits of TDMA and FDMA technologies, and allows for more flexibility, interoperability and migration between systems. By following these guidelines, we believe that proposed TDMA alternative technologies will be enabled to move forward in the Project 25 standards process. The suggested guidelines, consistent with the goals and objectives of Project 25 for Phase II TDMA, were adopted by the Steering Committee.

Attached to this letter is a copy of the press alert distributed by Motorola describing the unified guidelines. Please contact Jeanine Poltronieri at (202) 371-6896 regarding any questions concerning this matter.

Respectfully Submitted,

Richard C. Barth
Vice President and Director
Motorola, Inc.

Attachment

Cc:
Kathleen O'Brien Ham, Deputy Chief, Wireless Telecommunications Bureau;
D'Wana Terry, Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau;
Jeannie Kowalski, Deputy Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau;
Michael Wilhelm, Designated Federal Officer, NCC
Magalie Roman Salas, Secretary, FCC

Motorola Proposes Unifying Guidelines for
North American Two-Way Radio Communications Standard

Schaumburg, Ill (Oct. 25, 1999) - In support of the North American standards-setting process for two-way radio communications, Motorola proposed unified TDMA (Time Division Multiple Access) technology guidelines that would allow interoperability and migratability between TDMA technology and the FDMA (Frequency Division Multiple Access) technology already approved for Project 25 Phase II.

Motorola suggested the guidelines October 21 in Boulder, Colo., at a meeting of the Project 25 Steering Committee scheduled to consider alternative TDMA proposals that had been submitted for Phase II. The Steering Committee adopted the guidelines for evaluating TDMA technologies it will consider for Phase II alternatives.

The Project 25 Steering Committee, which is comprised of members representing state, local and federal users, has been developing digital standards for public-safety communications.

An FDMA technology platform was approved in 1996 as part of Phase I of the Project 25 standard, and key elements already have become ANSI (American National Standards Institute) standards. Phase II of the standard was designed to build on existing objectives of Phase I for interoperability and migratability and to increase the spectrum efficiency of radios from 12.5 kHz to 6.25 kHz. The Project 25 Steering Committee already has agreed to proceed with FDMA for Phase II and now is considering accepting a TDMA alternative.

Motorola's guidelines for the TDMA alternative include requirements to use the existing IMBE vocoder approved for Project 25 FDMA, to use the Project 25 operating codes for infrastructure command functionality, and to use Project 25 subscriber ID coding. The combination of the IMBE vocoder and the Project 25 infrastructure and subscriber coding would allow much greater interoperability and inter-system connectivity between TDMA and FDMA systems. The guidelines also specify Project 25 encryption definitions, which are considered critical to many public-safety radio users.

"While the North American user community has chosen FDMA technology as its standard, some of our North America customers recently have expressed interest in considering a TDMA technology alternative," said Jim Sarallo, Motorola senior vice president and general manager, North America Group. "The guidelines we submitted to the Project 25 Steering Committee provide a unified technology approach that blends many of the features and benefits from various proposals while offering users better system design and implementation flexibility, interoperability and migratability.

"Our goal has been to help our customers protect their investments in existing systems while giving them the ability to mix technology alternatives in the future without sacrificing full performance and capabilities," Sarallo continued. "We are recommending guidelines that will provide a unified technology solution to meet the 21st century requirements of our customers."

"Motorola supports user-driven standards worldwide," stated Wayne Leland, Motorola corporate vice president and Director, Spectrum and Standards. "We provide customers in Europe with TETRA TDMA systems because that is the standard developed by the European Telecommunications Standards Institute (ETSI), and we provide FDMA systems in North America as part of our commitment to the Project 25 ANSI standard adopted in this region of the world.

"However, TDMA proposals that have been made for Project 25 Phase II were incompatible with each other and didn't provide complete interoperability and graceful migration," Leland continued. "We believe that the guidelines Motorola has recommended will help ensure that the TDMA proposals being considered by the Steering Committee meet the stated requirements of the North American user community.

"The Project 25 Steering Committee has made important progress toward the development of a TDMA alternative that would be compatible with FDMA and working toward the goal of making the technology transparent to system operations," Leland added. "This would provide expanded opportunities for equipment suppliers while ensuring
that equipment meets the stated requirements of the North American user community."

Motorola, Inc. (NYSE: MOT) is a global leader in providing integrated communications solutions and embedded electronic solutions. Sales in 1998 were $29.4 billion.

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